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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,262	12/20/2001	Shunpei Yamazaki	12732-086001	7645

26171 7590 03/31/2003

FISH & RICHARDSON P.C.
1425 K STREET, N.W.
11TH FLOOR
WASHINGTON, DC 20005-3500

EXAMINER

HOGANS, DAVID L

ART UNIT	PAPER NUMBER
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2813

DATE MAILED: 03/31/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,262

Applicant(s)

YAMAZAKI ET AL.

Examiner

David L. Hogans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 77 and 78 is/are pending in the application.
- 4a) Of the above claim(s) 77 and 78 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10, 11 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I/Claims 1-20 in Paper No. 7 is acknowledged.
2. Newly submitted claims 77 and 78 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons.
3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claim 1-20, drawn to a light emitting device without a terminal, classified in class 257, subclass 88.
 - II. Claims 77-78, drawn to a light emitting device with a terminal, classified in class 257, subclass 99.

The inventions are distinct, each from the other because of the following reasons:

4. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination as claimed does not require the use of at least one terminal. The subcombination has separate utility such as a fully activated matrix display.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 77-78 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The requirement is still deemed proper and therefore is made **final**.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5-7, 11-13 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by US2001/0010370 Patent Application Publication to Kimura et al.

In reference to Claims 1, 5-7, 11-13 and 19-20, Kimura et al., in paragraph 0027-0029, teaches:

- a plurality of pixels (which inherently can be used in a personal computer) arranged in a matrix
- each pixel comprising a switching element (TFT) and a light emitting element
- a plurality of source signal lines which supply signals to the switching elements
- a plurality of power supply lines which supply potentials to the light emitting elements
- wherein at least one of the source signal lines comprises a first conductor and a first conductive coating on upper and side surfaces of the first conductor

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- wherein at least one of the power supply lines comprises a second conductor and a second conductive coating on upper and side surfaces of the second conductor

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over 5,726,461 to Shimada et al. in view of 4,033,833 to Bestel et al.

Claim 1

Shimada et al. teaches a plurality of pixels arranged in a matrix, each with a switching element and a light emitting element and a plurality of source signal lines for supplying a data signal to the pixel electrodes via the switching elements. (See column 4 lines 5-17)

Shimada et al. fails to explicitly teach wherein at least one source signal line is comprised by a conductor with a conductive coating.

However, Bestel et al., in column 3 lines 14-22, teaches wherein any conductive area may be selectively coated with any plateable metal. Furthermore, Bestel et al. teaches that this method can be employed to selectively plate a line.

It would have been obvious to one of ordinary skill in the art to modify Shimada et al. in view of Bestel et al. teachings of any conductive area that may be selectively coated with any plateable metal. Shimada's et al. modification via Bestel's et al. teachings is obvious because this method can be employed to selectively plate a line.

Claim 2

The method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. Note that a "product by process" claim is directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessmann*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above case law makes abundantly clear.

Claim 3

Incorporating all arguments of Claim 1 and noting that Bestel et al. teaches a conductive coating comprised by Cu or Ag. (See column 3 lines 15-22)

Claim 4

Incorporating all arguments of Claim 1 and noting that Shimada et al. teaches a signal line made from the same material as the gate electrode. (See column 7 lines 37-41)

Claim 5

Incorporating all arguments of Claim 1 and noting that Shimada et al. teaches wherein the switching elements are made from TFT's. (See column 4 lines 14-16)

Claim 6

Incorporating all arguments of Claim 1 and noting that Shimada et al teaches an active matrix with a plurality of pixels which could be incorporated in a personal computer device.

Claim 7

Shimada et al. teaches a plurality of pixels arranged in a matrix, each with a switching element and a light emitting element and a plurality of gate signal lines to

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electrically control the conduction state of the pixel electrodes via the switching elements. (See column 4 lines 5-17)

Shimada et al. fails to explicitly teach wherein at least one power supply line is comprised by a conductor with a conductive coating.

However, Bestel et al., in column 3 lines 14-22, teaches wherein any conductive area may be selectively coated with any plateable metal. Furthermore, Bestel et al. teaches that this method can be employed to selectively plate a line.

It would have been obvious to one of ordinary skill in the art to modify Shimada et al. in view of Bestel et al. teachings of any conductive area that may be selectively coated with any plateable metal. Shimada's et al. modification via Bestel's et al. teachings is obvious because this method can be employed to selectively plate a line.

Claim 8

The method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. Note that a "product by process" claim is directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessmann*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this

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issue); In re Marosi et al, 218 USPQ 289; and particularly In re Thorpe, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above case law makes abundantly clear.

Claim 9

Incorporating all arguments of Claim 7 and noting that Bestel et al. teaches a conductive coating comprised by Cu or Ag. (See column 3 lines 15-22)

Claim 10

Incorporating all arguments of Claim 7 and noting that Shimada et al. teaches a signal line made from the same material as the gate electrode. (See column 7 lines 37-41)

Claim 11

Incorporating all arguments of Claim 7 and noting that Shimada et al. teaches wherein the switching elements are made from TFT's. (See column 4 lines 14-16)

Claim 12

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Incorporating all arguments of Claim 7 and noting that Shimada et al teaches an active matrix with a plurality of pixels which could be incorporated in a personal computer device.

Claim 13

Shimada et al. teaches a plurality of pixels arranged in a matrix, each with a switching element and a light emitting element, a plurality of gate signal lines to electrically control the conduction state of the pixel electrodes via the switching elements and a plurality of source signal lines for supplying a data signal to the pixel electrodes via the switching elements. (See column 4 lines 5-17)

Shimada et al. fails to explicitly teach wherein at least one power supply line and at least one source signal line are comprised by a conductor with a conductive coating.

However, Bestel et al., in column 3 lines 14-22, teaches wherein any conductive area may be selectively coated with any plateable metal. Furthermore, Bestel et al. teaches that this method can be employed to selectively plate a line.

It would have been obvious to one of ordinary skill in the art to modify Shimada et al. in view of Bestel et al. teachings of any conductive area that may be selectively coated with any plateable metal. Shimada's et al. modification via Bestel's et al. teachings is obvious because this method can be employed to selectively plate a line.

Claim 14

Incorporating all arguments of Claim 13 and noting that Bestel et al. teaches a conductive coating formed by electroplating. (See column 3 lines 15-22)

Claim 15

Incorporating all arguments of Claim 13 and noting that Bestel et al. teaches a conductive coating comprised by Cu or Ag. (See column 3 lines 15-22)

Claim 16

The method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. Note that a "product by process" claim is directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessmann*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above case law makes abundantly clear.

Claim 17

Incorporating all arguments of Claim 13 and noting that Shimada et al. teaches a signal line made from the same material as the gate electrode. (See column 7 lines 37-41)

Claim 18

The method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. Note that a "product by process" claim is directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessmann*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above case law makes abundantly clear.

Claim 19

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Incorporating all arguments of Claim 13 and noting that Shimada et al. teaches wherein the switching elements are made from TFT's. (See column 4 lines 14-16)

Claim 20

Incorporating all arguments of Claim 13 and noting that Shimada et al teaches an active matrix with a plurality of pixels which could be incorporated in a personal computer device.

Response to Arguments

3. Applicant's arguments filed in Paper No. 12 have been fully considered but they are not persuasive.

Claims 1-20

Applicant portends that Shimada et al. does not teach light emitting elements. The Examiner maintains that Shimada et al. does teach light emitting elements. The active matrix taught by Shimada contains a plurality of pixels that when electrically charged exert an electric field influence over the adjacent liquid crystal thereby causing light emission. Therefore, the active matrix of Shimada et al. contains light emitting elements.


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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Hogans whose telephone number is (703) 305-3361. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on (703) 308-4940. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

dh 
March 23, 2003


CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800